BIOWEDICAL WASTE WANAGEMENT:

STATUS REVIEW & THE LABORATORY WASTE PERSPECTIVE



-Dr. (Maj) P.Kumar Nodal Officer, Bio medical waste mgmt AIIMS

तीन बैग, एक डिब्बा और एक गत्ता

सामान्य कचरा

- कार्डबोर्डों
- रैपर
- भोजन
- कागज़



इन्फेक्टेड

- > मानवीय अंग
- > कॉटन के स्वाबस
- खारिज, साइटोटोक्सिक दवा
- > खून की थैली

कैथेटर

- ट्यूबिंग्स
- सिरिंजों सुइयों के बिना
- मूत्र बैग आईवी सेट

नोकदार

- सुइयों फिक्स्ड सुइयों के साथ सीरिंज्
- स्केलपेल ब्लेड
- तेजधार

कांच

- > कांच के बने पदार्थ
- धातु शरीर प्रत्यारोपण





















PROCUREMENT:

Puncture proof & hub cutters containers already in RC





मिले में पड़ी ...









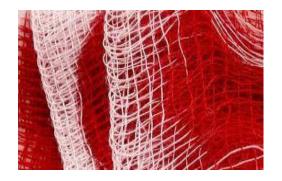




SCHEDULE I : YELLOW CATEGORY: SOILED WASTE

(a)Human Anatomical Waste: Human tissues, organs, body parts and fetus (b)Animal Anatomical Waste:

(c)Soiled Waste: Items contaminated with blood, body fluids like dressings, plaster casts, cotton swabs and bags containing residual or discarded blood





(d) Expired or Discarded Medicines including antibiotics

DRUGS

(d) CYTOTOXIC DRUGS: including all items contaminated with cytotoxic drugs along with glass or plastic ampoules, vials etc.

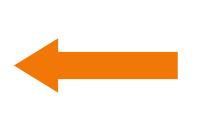














Common bio-medical waste treatment facility: Incineration



TTT PINSTE STERIER !













PLASTIC RECYCLABLE WASTE

(a) Wastes generated from tubing, bottles, intravenous tubes and sets, catheters, urine bags, syringes (without needles and fixed needle syringes) and gloves













catheters, urine bags, syringes (without needles and fixed needle syringes) and gloves

Autoclaving or micro-waving/hydroclaving followed by shredding or mutilation



INTECTIOUS PLASTIC WASTE

Ward/individual lab



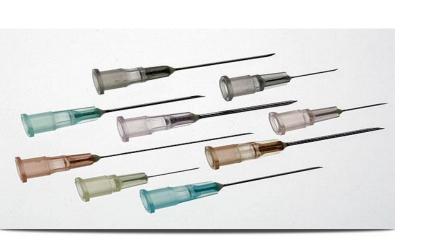


Sluice room/ common area





सफेद में सूई.... नोकदार चीज़े जैसे सुइयां, स्काल्पेल, ब्लेड या अन्य कोई नोकदार वस्तु









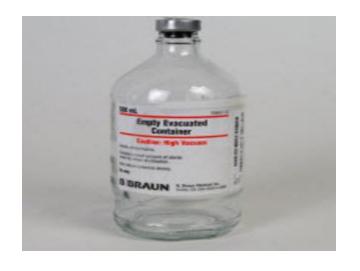




BLUE FOR BOTTLES....









कार्ड बोर्ड में कांच.



GLASS WARE: CARDBOARD BOXES & BOTTLES

Video of glass bottles intramural transport







PROCUREMENT: RATE CONTRACT

- Small bags
- Small bins
- Puncture proof container and hub cutter
- Large bins











FRESH TENDER FLOATED: CONSUMABLES FOR BIWW MCMT.









SLUICE ROOM/ CENTRAL COLLECTION POINTS: THE BUCKET LIST?





CENTRAL COLLECTION FACILITY





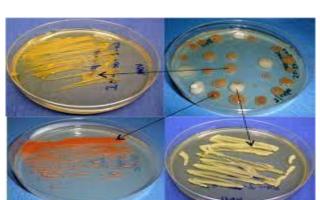


LABORATORY WASTE: A SPECIAL FOCUS













Microbiology, Biotechnology and other clinical laboratory waste: Laboratory cultures, stocks or specimens of microorganisms



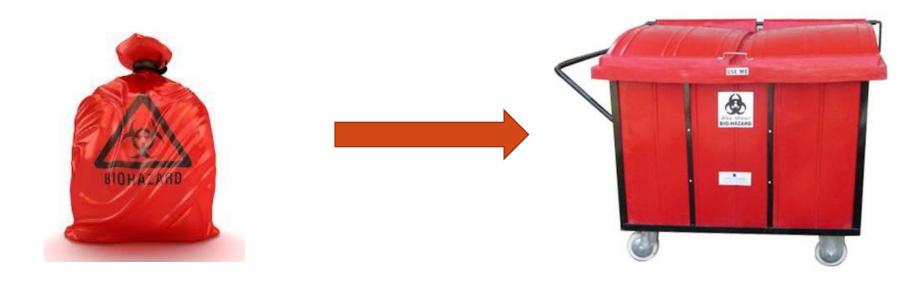
DESIGNATED YELLOW, RED & BLUE TROLLEYS







PLASTIC & RUBBER WASTE:





BOTTLE WASTE







ONSITE TREATMENT: LAB WASTE





LAB WASTE: MICROWAVE !!

- A chemical disinfectant approved by NACO or WHO?
- Blood bags disinfection
- Microwave: Location and process flow.:
- Centralised or decentralised





MICROWAVE: ONSITE TREATMENT



- 4 microwaves: 60 Ltrs
- 2 for yellow wastes, 1 for red and 1 for bottle(blue & white trolley)
- 1 hr cycle, 8hrs shift to be run by outsourced staff
- METALS & GENERAL WASTES SHOULD NOT BE INCLUDED



LIQUID EFFLUENT WASTE. STP



Sludge cakes





THE WEBSITE



BIO-MEDICAL WASTE MANAGEMENT

Last Updated On: 20 Sep 2017

INTRODUCTION

As per the act passed by the Ministry of Environment and Forests in 1986 & notified the Bio Medical Waste (Management and Handling) Rules in July 1998, it is the duty of every "occupier", (in the case of AIIMS, the Director, AIIMS) i.e. a person who has the control over the institution or its premises, to take all steps to ensure that waste generated is handled without any adverse effect to human health and environment.

The biomedical waste management policy followed at AIIMS is as per the Biomedical Waste Management Rules 2016, notified by the Ministry of Environment, Forest and Climate Change, Government of India as per the gazette notification dated 28th March 2016. Prior to this notification, AIIMS had been following the Bio-medical Waste (Management & Handling) Rules 1998 notified by the same ministry. At present, the biomedical waste management at AIIMS has been outsourced to a common biomedical waste management facility, M/S Biotic Waste Solutions Pvt. Ltd..

DEFINITIONS

• Hospital waste: refers to all waste, biological or non-biological that is discarded and not intended for further use.



SEGREGATION: तेरे BIN या मेरा BIN ?

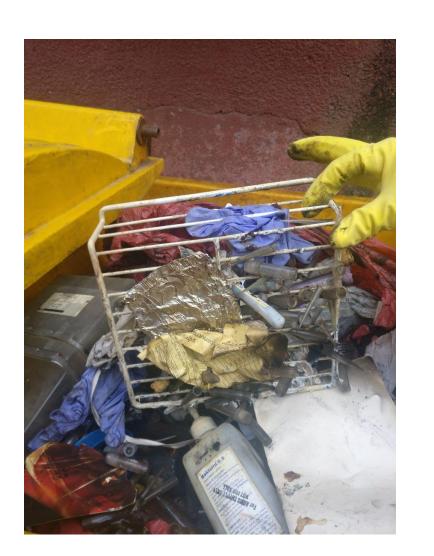






GROSS ERROR IN SEGREGATION







SYSTEMS APPROACH FOR SUSTAINABILITY



बायो मेडिकल







- मानवीय अंग एवं जीव वेस्ट (मानवीय टिशू, शारीरिक अंग वेस्ट)
- रक्त से सनी वस्तु (पट्टी, प्लास्टर, ब्लड बैग)
- <mark>अवधि समाप्त दवाइयाँ</mark> (एटिबायोटिक्स दवाइयाँ)
- कैमिकल वेस्ट (जैव-विज्ञान में इस्तेमाल कैमिकल)
- रक्त से दूषित लीनेन, बिस्तर
- लेबोरेटोरी वेस्ट (ब्लंड बैग, कल्चर, माईक्रोऑरगेनिज़्म स्पेसिमेन)
- साइटोटोक्सिक वेस्ट (साइटोटोक्सिक दवाईयों से दूषित वायल, एमप्यूल, प्लास्टिक इत्यादि)



- Human & Animal Anatomical Waste (Tissues, Organs, Body Parts, Fetus etc.)
- Soiled Waste
 (Dressings, Plaster Casts, Cotton Swabs, Residual/Discarded Blood Bags)
- Expired or Discarded Medicine (Antibiotics etc.)
- Chemical Waste (Discarded Reagents, Disinfectants)
- Discarded Linen, Mattresses
 & Beddings
- Pre-Treated Microbiology, Biotechnology & Clinical Lab Waste (Blood Bags, Cultures, Residual Toxins,

(Blood Bags, Cultures, Residual Toxins, Dishes & Devices, Microorganism specimen)



(All items Contaminated with Cytotoxic drugs along with glass or plastic ampoules, vials etc.)

- रीसायकल योग्य इंफैक्टेड वेस्ट (ट्यूब, बोतल, इंट्रावीनस ट्यूब और सेट, कैथेटर, यूरो बैग, बिना सूई की सिरींज, वैक्यूटेनर एवं दस्ताने)
- लाल थैला/ RED BAG
- Contaminated Waste (Recyclable)

(Tubings, Plastic Bottles, Intravenous tubes & sets, Catheters, Urine Bags, Syringes without needle, Vaccutainers and Gloves)

- नुकीला एवं धातु वाला वेस्ट (सूई, सूई लगी सिरीज, स्कालपेल्स, ब्लेड एवं अन्य नोकदार वस्तु)
- सफेद डिब्बा / WHITE CONTAINER (पंचर, टैम्पर और लीक प्रूक)/(PUNCTURE, TAMPER AND LEAK PROOF)
- Waste Sharps Including Metals (Needles, Syringes with fixed Needles, Needles from needle tip cutter or Burner, Scalpels, Blades, Contaminated Sharp objects)

- कांच का वेस्ट (दूटा हुआ कांच, दवाई की शीशियां एवं एमप्यूल)
- धातु वाले इम्प्लांट

गत्ते का डिब्बा/ CARDBOARD BOX (नीले चिन्ह के साथ)/(WITH BLUE MARKING)



- Glassware (Contaminated Broken/Discarded Glass, Vials, Ampoules)
- Metallic Body Implants



कीन बनेगा करोड़ पति- 1?





कीन बनेगा करोड़ पति- 2?





कीन बनेगा करोड़ पति- 3?





कीन बनेगा करोड़ पति- 4?





काले में जनरल कुड़ा

•कागज़, बचा हुआ भोजन,पैकिंग का गत्ता





BIO MEDICAL WASTE: सारांश

रंगों की सही पहेचान:-

- 1. पीले में खून से सनी पट्टी, बेकार दवाइयां इत्यादि
- 2. लाल में लचीला प्लास्टिक
- 3. सफ़ेद में सुई, स्काल्पल इत्यादि
- 4. गत्ते में शीशें की बोतल व टूटे अम्पौले
- 5. सारे LAB WASTE पहेले ट्रीट होंगे
- 6. काले में सामान्य कूड़ा



